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Health services of Project Head Start Child Development Centers provide: a medical evaluation of each child including medical history, developmental assessment, and physical examination; screening tests for vision, hearing, speech, and tuberculosis; laboratory tests of urine for albumin and tests of sugar and blood for anemia; dental assessment; completion of immunizations; and followup services. Record keeping procedures include using a data analysis form and a complete medical history and physical examination form. The staffs for the medical program should be composed of adequate professional and volunteer personnel. The center should have, in addition to a physician, a registered nurse who is preferably a public health nurse. The services of such consultant specialists as dentists, orthopedists, ophthalmologists, otolaryngologists, neurologists, psychiatrists, audiologists, and psychologists should be secured. Parents can serve as volunteers.

Project funds are allocated for a physician's services if volunteer medical assistance is not available, and for a nurse's services when a public health nurse is not available. Project funds are also provided to pay for hearing aids, materials for eyeglasses, laboratory-materials, other medical and dental personnel, and measles vaccine. The health and safety of both children and staff members are assured through the physical arrangement of the Center, the kind of furnishings, and the variety of play equipment chosen.

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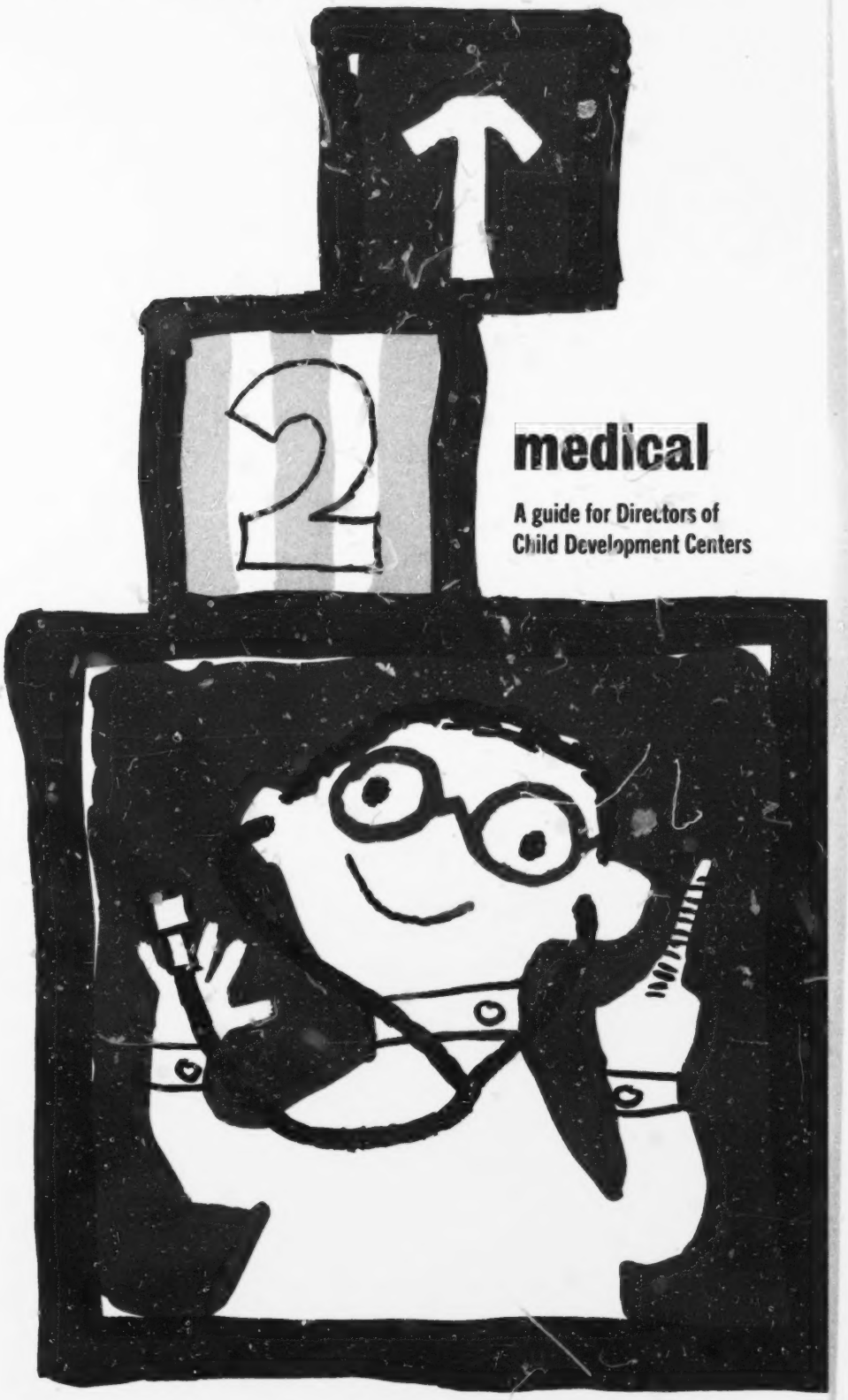

medical

A guide for Directors of Child Development Centers

Office of Economic Opportunity, Washington, D.C.

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education

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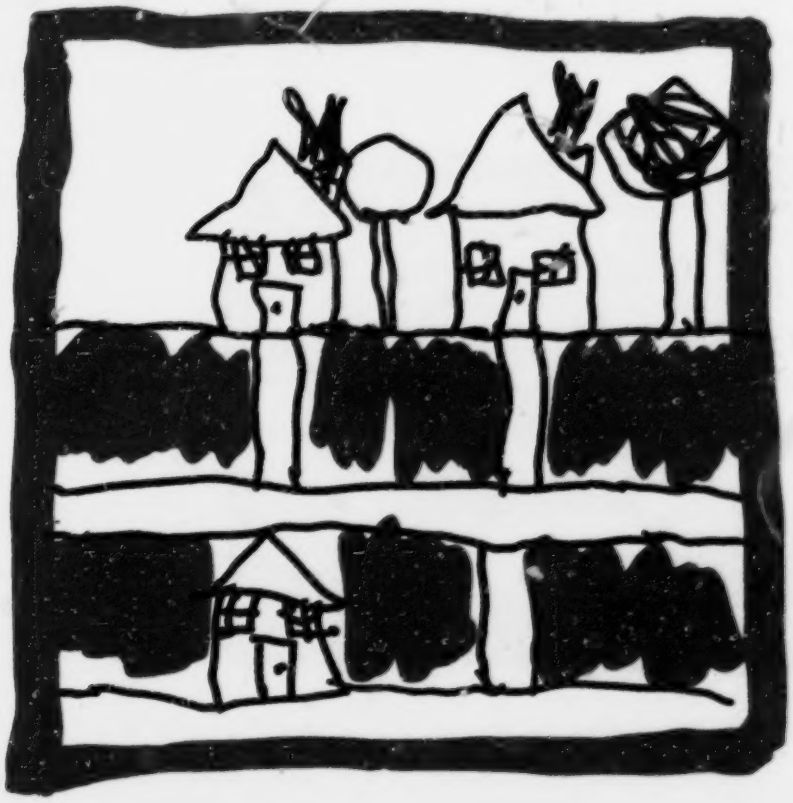
THE CHILD DEVELOPMENT CENTER

The Child Development Center is both a concept and a community facility. In concept it represents the drawing together of all those resources—family, community and professional—which can contribute to the child's total development. It draws heavily on the professional skills of persons in nutrition, health, education, psychology, social work, and recreation. It recognizes both paid and volunteer non-professionals can make important contributions. Finally the concept emphasizes the family is fundamental to the child's development. Parents should play an important role in developing policies; will work in the Centers and participate in the programs.

As a community facility the Child Development Center is organized around its classroom and outdoor play areas. Ideally it should also provide a program for health services, parent interviews and counseling, feeding of the children, and meetings of parents and other residents of the community. The space is arranged so as to permit working in small groups or individually with the children. Where some activities are performed at other locations, the staff should function as an integral part of the Center.



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I. Introduction

Project Head Start is designed to provide more adequate and more accessible medical services to pre-school children of low income families, in conjunction with the other activities of each Child Development Center.

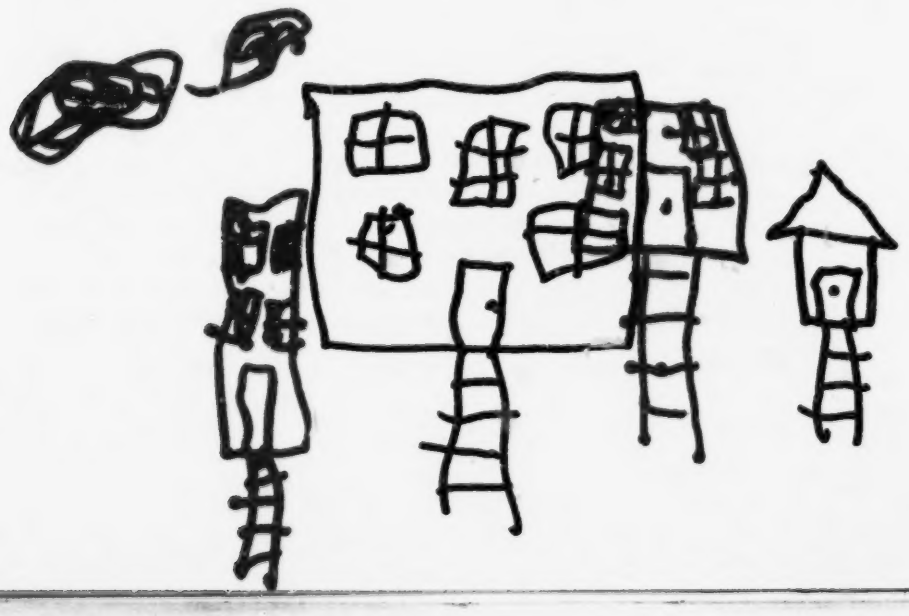
This unique aspect of the program, the incorporation of health, medical, and social welfare services with pre-school education in a single Child Development Center, is an essential part of the planning for Project Head Start.

The program will include a medical evaluation of each child followed by remedial care to correct conditions that could interfere with the child's academic and social development.

Coordination of the efforts of physicians, nurses, teachers and social workers will contribute not only to adequate health care for each child enrolled in the program, but also to the organization and implementation of a family health education program.

Nationwide, Project Head Start will collect medical data based on the records of each child enrolled at a Child Development Center. Significant information gathered from this mass screening may suggest new methods for meeting national health needs.

Those responsible for planning the health and medical component of a Child Development Center should refer to a manual prepared by the Child Health Committee of the American Public Health Association, entitled: "Health Supervision of Young Children—A Guide for Practicing Physicians and Child Health Conference Personnel." (A.P.H.A., 1790 Broadway, New York, N.Y., 10019) APHA's guidelines have been endorsed by the American Academy of Pediatrics, the Association of State Maternal and Child Health and Crippled Children's Directors, the U.S. Children's Bureau and the National League for Nursing.



II. The Health Service Program

The principal health services offered in the Child Development Centers are listed below and described subsequently in more detail.

A. Principal Services

1. Medical evaluation of each child enrolled in the Center, including medical history, developmental assessment, and physical examination.
2. Screening tests
   a. vision
   b. hearing
   c. speech
   d. tuberculin testing
3. Laboratory tests
   a. urine testing for albumin and sugar
   b. blood testing for anemia
4. Dental assessment
5. Completion of immunizations
6. Psychological evaluation
7. Discussion with parents
8. Teacher observation
9. Appropriate follow-up services

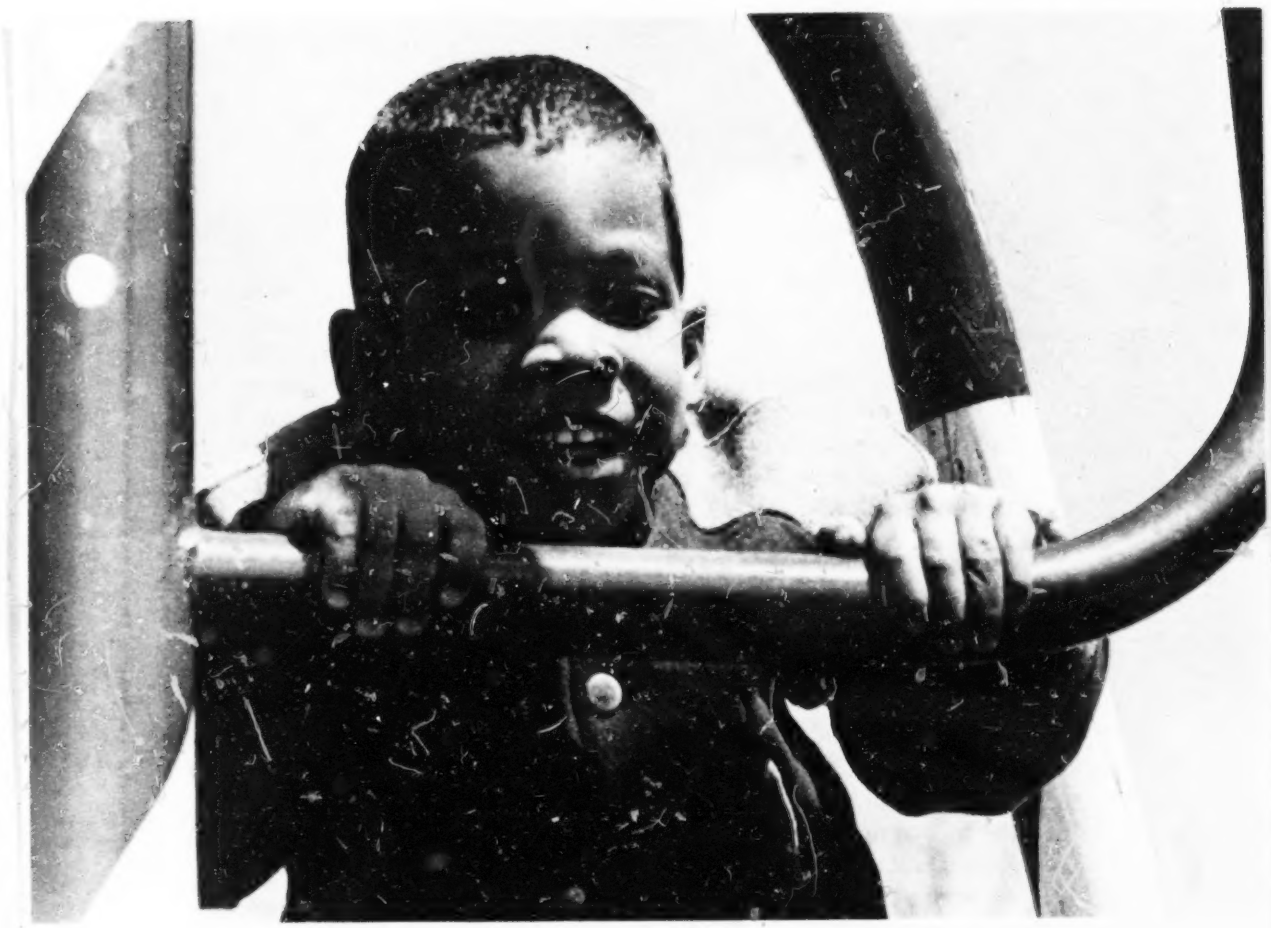
B. Description of Services

1. Medical Evaluation

The physician associated with the Child Development Center should evaluate each child shortly after the program begins. He may recruit other professionals to assist him and delegate some procedures to nurses or other auxiliary health personnel. It is advisable to have the child's parents and teacher present during the assessment to provide information and to discuss problems and desirable follow-up procedures.

In the course of the assessment, the physician should begin a medical history of the child, noting various stages of physical growth and development. Parents can be helpful in recalling such events as the age at which the child walked, used single words, composed sentences, was completely toilet-trained and was able to dress without assistance.

In addition to the developmental assessment, the child's record should include information on birth history, past illnesses, past inoculations and vaccinations, and a detailed history of familial disease. The physician will record any history of exposure to tuberculosis and will recommend appropriate follow-up measures.



The physician will perform a complete medical and neurologic examination with particular emphasis on the following items:

a. Examination of the eyes, including particular attention to extra-ocular movements to screen for strabismus. Pupillary reflexes should also be tested. When practical, funduscopic examination and visual fields are desirable. These findings must be evaluated in conjunction with the result of the vision screening test already on the record. (See page 6 on Screening Tests and Appendix III.)

b. Examination of the ears with a description of the findings. Tympanic membrane abnormalities correlate closely with varying degrees of hearing impairment (Appendix I).

c. For speech screening, the physician should note whether or not sentences are used by the child and how intelligible these are. Valuable information may be provided by parents and teacher.

d. With the child undressed, observe the posture, gait and general coordination. Teachers may supply valuable clues to neuromuscular and orthopedic abnormalities.

e. Measurements should include height and weight; these data should be plotted on the growth chart prior to the physician's examination.

2. Screening Tests

Tests of vision, hearing and speech can prove invaluable in assessing the individual child. Identification of defects or problems at this early stage followed by appropriate remedial care may greatly facilitate a child's subsequent academic progress.

Consultant specialists may be helpful in developing appropriate screening procedures. Trained volunteers may be able to perform specific testing procedures under professional supervision. These screening processes should be completed, when possible, before the physician makes his formal assessment of the child's health to provide him with as much pertinent information as possible. For more detailed information on screening procedures see Appendices II and III.

Because tuberculosis continues as a major public health problem among children of low-income families, each child should be given a Tuberculin Tine test. Any positive reaction should be promptly followed up. All family and close household contacts of such children should be tested to determine the source of the contact. Local health departments and tuberculosis associations provide follow-up services for such contacts as well as INH prophylaxis for children in their tuberculosis control programs. For procedures commonly used in such programs, see Appendix IV.

3. Laboratory Tests

The urine of each child should be examined for albumin and sugar. Simple paper strip methods may be used initially; complete urinalyses should be performed when indicated.

When a micro-hematocrit centrifuge is available, a micro-hematocrit determination for anemia is extremely valuable for this group of children. Hemoglobin determinations may also be useful, depending on the method used, but are less desirable than the micro-hematocrit.

4. Dental Assessment

Because neglect of dental care of pre-school children is so frequent among low-income families, a program for dental health deserves special attention.

This program should be designed: a) to identify children in need of dental care, b) to refer them to appropriate dental clinics or private dentists, and c) to develop a program for dental health education at the Center.

Because of the large number of dental problems in this group of children, complete care and correction may be an unrealistic expectation at this time. However, in each community, a dental program for Child Development Centers can be organized to begin an assault on this massive problem.

Because the number of dentists available in each community varies, no general guidelines can be outlined here. A few children might be scheduled for examination by participating dentists each day or week, with examinations spread over four-to-six weeks to avoid a rush of initial appointments. Each community, however, must establish its own program in consultation with local dentists, the local dental society or the health department.

Ideally, each examination should include prophylactic care, instruction in good dental care procedures and provision for preventive services. It is preferred that the examining dentist follow through on treatment. When this is not possible the examining dentist should make recommendations for additional care required. Such care may be obtained by referral to appropriate clinics or to private dentists.

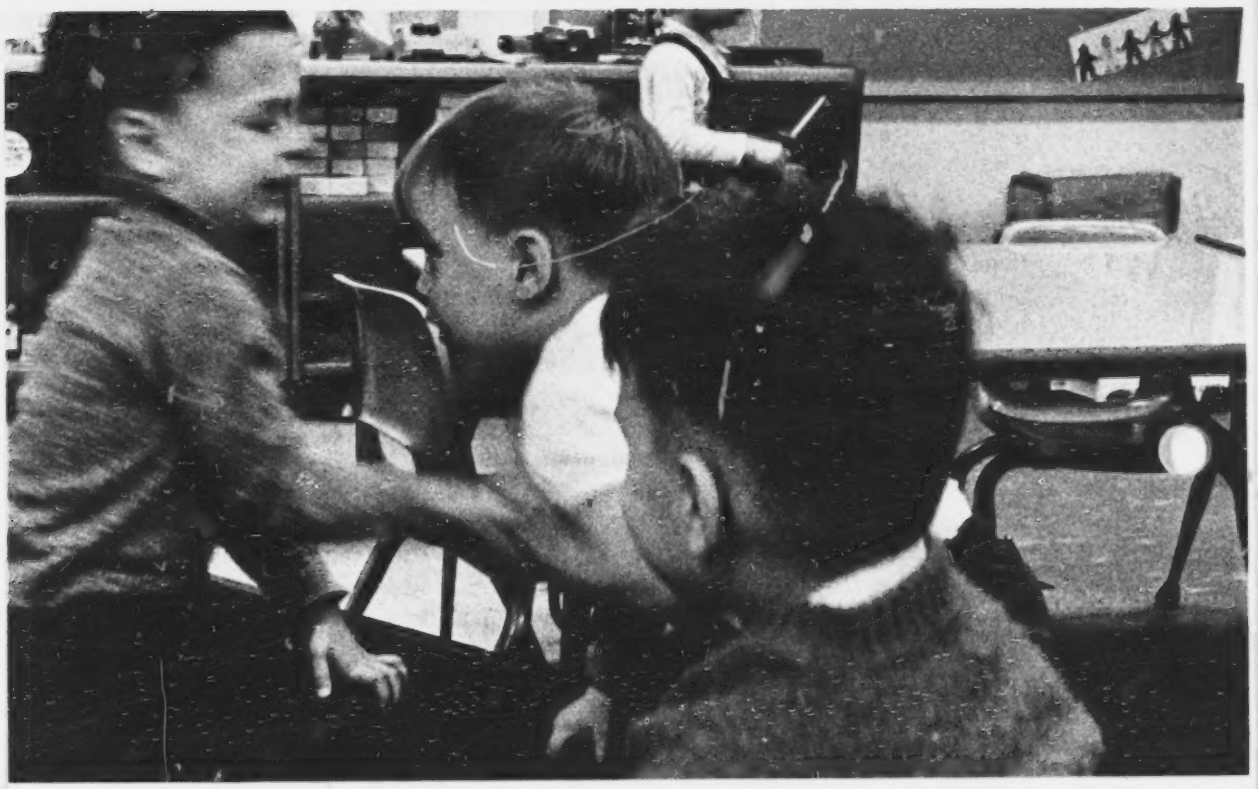
In communities with limited resources for therapy, a compromise in the kinds of treatment provided may be unavoidable. Priorities may be established to handle: (a) acute painful conditions, (b) oral infections, (c) restoration of carious permanent teeth, (d) restoration of carious primary teeth, etc. Such suggestions are not definitive; each community's program must depend on its own resources.

After consultation with appropriate professionals, each Center should incorporate into its program a plan for teaching the children elements of good dental hygiene.

5. Completion of Immunizations

Each child should receive whatever immunizations he lacks. An American Academy of Pediatrics booklet entitled *Report of the Committee on the Control of Infectious Diseases* (See Bibliography, Appendix V) gives recommended schedules for inoculations. These include boosters, smallpox vaccination or revaccination, oral polio virus vaccine and measles vaccine.

Because of the possible complications associated with measles in young children, protection against this disease is as important as the other immunizations. When measles vaccination is not included in the program of the Well Child Clinics of the local health department, the Center may purchase measles vaccine with Project funds. Health departments will usually supply materials for routine inoculations.



6. Psychological Evaluation

In the amount of time available for the health evaluation a complete and individualized assessment of the psychological developments of each child is not possible. The staff of the Center will undertake such assessment using guidelines to be provided.

7. Discussion with Parents

The parents' presence during the evaluation of their child can be valuable in providing information concerning each child's development. The physician may also wish to take this opportunity for a discussion with parents of family health practices, with emphasis on good nutrition, adequate rest, proper hygienic practices and good dental care. Some helpful counseling on child rearing may be welcome to parents at this point.

Results of various screening tests may be sent to parents and their help enlisted in pursuing a follow-up plan for preventive or remedial procedures.

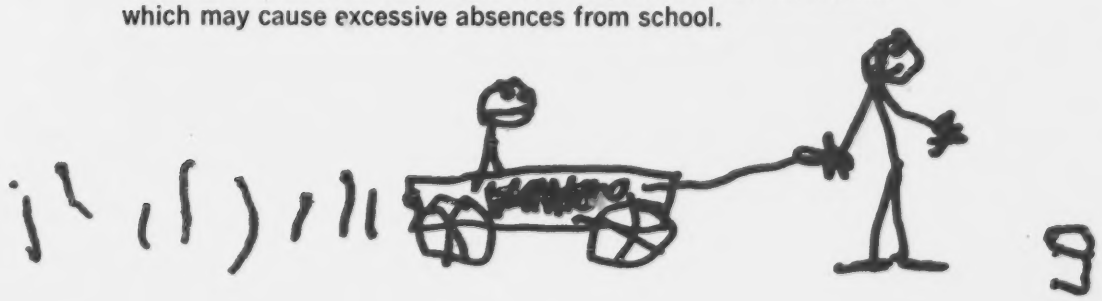
As a part of the Center's on-going program for parents, programs in health education and child rearing may be devised with the assistance of physician, nurse and other community resource people. The greater a parent's identification with his child's program at the Center, the greater may be the individual child's chance for development.

8. Teacher Observation

The usual medical and behavioral evaluation procedures will be supplemented by the observations of teachers during the children's daily activities. During this prolonged observation period, teachers may detect conditions not immediately apparent during formal evaluations. The Center should acquaint teachers fully with this responsibility for careful observation, and develop some formal plan for enabling teachers to discuss their observations with the Center's physician. The full potential of combined services as encompassed in each Center can be realized if the people closely involved take advantage of the opportunity for exchange of information. The physician's comments will assist teachers in their daily work with children; the range of information gathered by teachers will aid the physician in making diagnoses, particularly in the detection of sensory and neurological abnormalities.

9. Follow-Up Procedures

During the various evaluation processes, health professionals at each Center will make a particular effort to identify children with correctible chronic medical problems. They will pay particular attention to abnormalities such as visual or auditory defects which may impair subsequent school performances. Evaluators will be concerned also with conditions such as asthma which may cause excessive absences from school.



After a problem is identified in a particular child, the physician, nurse and other appropriate Center personnel will devise a plan for follow-up treatment and describe this plan to the child's teacher if she has not been involved previously. The nurse, teacher, and other staff members then discuss the child's problems with his parents, encouraging the parents to carry out the plan.

Volunteers may arrange for transportation for the care of children outside the Center. Social workers may explore additional community resources. However, the teacher and nurse should retain a central position in these activities; they are familiar with child and family, they have most frequent contacts with the family and they may be unusually effective in discussing and interpreting problems to family members.

Follow-up care can usually be provided through referral to a community clinic or to a private health source. Center staff members should determine what resources are available to Head Start children. When local services are not adequate to the needs, staff members at the Center should identify these deficiencies and stimulate community efforts to provide the missing services.

Staff members must not only find the necessary diagnostic and treatment facilities, but sometimes must also locate funds to pay for the services required. Considerable initiative and enterprise may be necessary in such an undertaking. The Center's physician, nurse or social worker may provide assistance; local or state health officers may suggest sources of funds. Centers may explore existing medical care resources such as the Crippled Children's programs, government rehabilitation programs and others which may be used to defray expenses of needed medical, hospital or surgical care.

At the end of the summer's program, follow-up services may not be complete for some children. The medical records of all children will be sent to the schools they enter. School health authorities should assume responsibility for completing necessary follow-up care. Such follow-up is now a part of many school health programs.

III. Procedures and Facilities

A. Record Keeping

Adequate record keeping is essential to continuity of medical care, particularly in dealing with the rapid growth and development of the pre-school child. All Centers will complete a medical record form for each child. Two forms have been prepared for this purpose. One is a data analysis form. The other is a complete medical history and physical examination form very much like the familiar Well Child Clinic record. When used together there is no need for entering the same information on both forms.

1. Individual medical history and examination form for each child.

For the child's individual permanent record, Centers may use the medical history form employed by their states or localities for Well Child Clinics or for pre-school examinations. State or local health officers, or departments of maternal and child health will probably be willing to supply Centers with such forms.

Or, forms for recording the child's medical history and physical examination may be obtained by writing the Head Start central office and requesting the number needed. Items are so arranged that information provided on the data analysis forms need not be entered on this form. The carbon copy of the data analysis is placed in this folder and becomes a part of the permanent record.

2. Summary data sheet for each child

Collection of medical data will permit further identification of the most pressing health needs of pre-school children in low-income families. To facilitate this kind of data collection, special summary data forms will be sent to each Center from the Project office. A set of such data sheets should be completed for each child.

These sheets will be returned to the Project office for analysis and will serve as an integral part of the complete history and examination form noted above.

Clerks or volunteers may assist the physician in filling out these medical records. All records should be accurate and complete. If volunteers are used, they should be made aware of the confidential nature of medical records.

B. Facilities

An area of the Center should be set aside as a clinic facility for physical examinations, immunizations and conferences. The local department of health may be willing to loan the minimal amount of equipment needed. The necessary equipment is listed in the previously noted reference book, *Health Supervision of Young Children*.

IV. Staffing

For an optimal medical program, adequate professional and volunteer personnel must be available. The physician, nurse and teacher all contribute to the health care of children in the Center. Obviously, the medical and nursing personnel are concerned with evaluation and with decisions regarding care, but the teacher provides valuable observational and follow-up assistance.

A. Physician

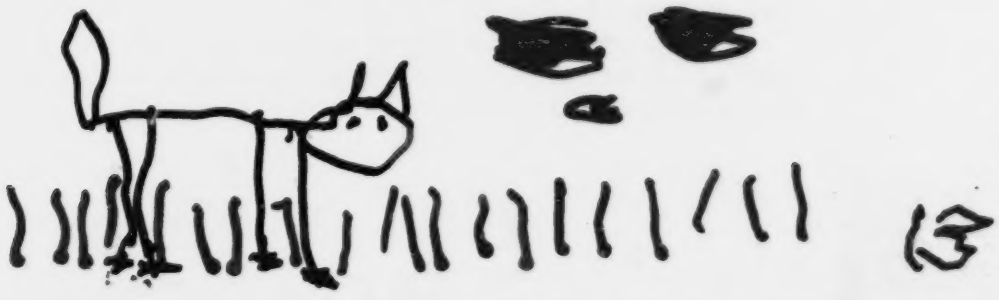
A physician serves as the medical director of the Center and should be available during the eight-week period to supervise planning of the medical program, give general health advice, consult with parents and teachers and help formulate health policy. He will perform or supervise individual examinations of each child. If he sees the need, additional personnel such as medical students may be hired to assist with physical examinations. The physician may also aid in obtaining the participation of other professional people such as dentists and medical specialists.

The Center should engage a physician in consultation with the local health department, medical society, hospital, medical school or other appropriate agency. One of these agencies or the local section of the American Academy of Pediatrics may assist in recruiting. If possible, the Center should engage a pediatrician or other physician particularly interested in child care. If volunteer medical service is not available, Project Head Start funds are available for physician services and for related expenses.

The same physician should serve for the duration of the project. Better continuity of care is maintained when the same physician serves the same families over a period of time.

B. Nurse

The center should secure the services of a registered nurse, preferably a public health nurse with training and experience in the public health field. The local health department or visiting nurse association may be willing to provide such a person. If not, Project Head Start funds are available, and the Center should engage a registered nurse for the required number of hours. In this event, the nurse should be instructed in Well Child Clinic procedures by a public health nurse. She should also work closely with the specific public health nurse who may provide service to families of children enrolled at the Center.



Working under medical supervision, the nurse will share in the management of the health services at the Center. With the physician's advice, she will make plans and arrange for the instruction of volunteers who help with screening tests or with medical and follow-up record keeping. In consultation with physician and teachers, she will make arrangements to assure proper follow-up care for each child.

The public health nurse will be able to use a comprehensive family approach while also assisting in the health care program at the Center. She may be able to spend a few hours a day or a few hours a week working with children or parents at the Center. Because the district public health nurse is familiar with community health resources, she is also most effective in planning follow-up care.

Some other duties for which the nurse must assume responsibility are:

1. General management of the clinic operation including appointments for medical examinations, records and reports. Attention to arrangements for the physical facilities for examining children.

2. Explanation to children of the various health screening procedures and laboratory tests; teachers should have briefed children previously as well. Taking certain parts of histories. Supervision of weighing and measuring and other screening procedures and tests.

3. Conferring with parents before and after they see the physician. Referring mothers to other health resources as indicated by the physician.

4. Home visits when necessary, particularly to explain follow-up plans to parents. Participation with other Center staff in planning health education programs for parents, such as group instruction, demonstration, exhibits, selecting educational material, etc.

5. Meeting with other Center staff members and with the physician to discuss individual problems requiring decision about further diagnosis or treatment.

C. Consultants

The Center should make every effort to arrange for the services of a dentist to perform the dental evaluations. A local dentist or the local dental society may be helpful in recruiting a qualified professional. Often the local health department can also be of assistance in arranging for such dental care.

The services of other specialists, such as orthopedists, ophthalmologists, otolaryngologists, neurologists, psychiatrists, audiologists, and psychologists may be obtained by appropriate referral to hospital clinics or to consultation clinics of such services as the state crippled children's program. Medical and other professional societies, local or state health departments, hospitals or medical schools may be helpful in suggesting the means for obtaining specialty consultants where needed.

D. Volunteers

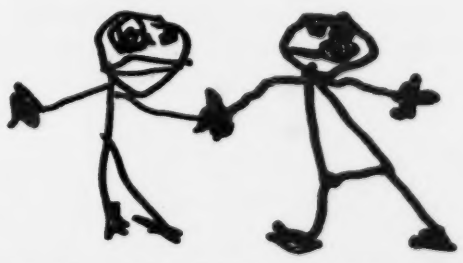
The Center staff should ask interested parents to serve as volunteers. Neighborhood organizations, local voluntary health agencies or civic service groups may also offer volunteers for health activities. But the involvement of parents is particularly desirable.

Volunteers provide valuable services directly to the program, and also prove valuable in explaining the project to others. They can become effective interpreters to the community at large and help to mobilize the community support necessary to this program.

General guidelines for working with volunteers have been prepared under the title **Working with Head Start Volunteers.** However, those working in the health area will be under the supervision of the nurse or physician.

Appropriate duties for volunteers when assigned to the health program may include:

1. Setting up rooms for medical examinations or screening tests. Keeping rooms in order during and after sessions.
2. Pulling health records as needed, recording identifying data, and assisting physician and dentist to record findings.
3. Receiving and announcing children, making mothers feel at home, introducing them to health staff they are to see.
4. Weighing and measuring, taking temperatures if required. Providing transportation (cars used for this purpose should be insured).
5. Carrying out or assisting with screening tests for which they have been adequately trained.



V. Availability of Project Head Start Funds

If volunteer medical assistance is not available, funds may be allocated for a physician's services and for related expenses such as travel. When a public health nurse is not available to the Center, a nurse may be hired and paid with Project funds. The costs for transportation to and from a clinic for the initial examination may also be paid for.

Funds are provided to pay for hearing aids and the materials for eyeglasses. Laboratory material required for the urine screening can be purchased with Project funds. When essential for adequate medical or dental evaluation of children, other medical or dental personnel may be paid consultant fees for time devoted to the Center or clinic. If measles vaccine is not provided by the local health department, it may be purchased with Project funds.

VI. General Health and Safety Practices for the Center

The health and safety of both children and staff members must be assured through the physical arrangement of the Center, the kind of furnishings, and the variety of play equipment chosen. Center staff members must examine local health and safety regulations and confer with appropriate officials in order that Center operations and facilities conform with these requirements.

Procedures and policies should be established, in consultation with the physician, concerning children who exhibit symptoms of acute infectious diseases.

Indoor and outdoor play areas require periodic inspection to be certain that obstacles dangerous to play are detected and removed or repaired. Old wooden floors likely to splinter easily should be checked frequently. Sharp projections on buildings or play equipment should be removed or covered to prevent injury. Surfaces beneath climbing equipment should be covered with mats if indoors, or sawdust or other soft material if outdoors. If new outdoor equipment is being installed, it should be placed over grass or unpaved areas and the legs set in concrete footings. Dangerous play situations should be anticipated and precautions taken to reduce the likelihood of accident and injury.

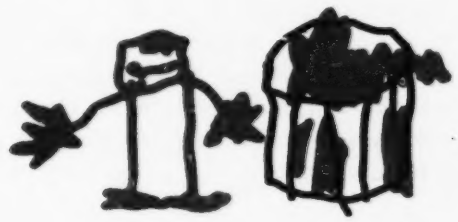
Any home-made play equipment donated or obtained by the Center must be smoothly finished to guard against splintering. Lead-free non-toxic paint should be used for finishing such equipment. Play blocks must be made of hard wood such as maple which will not splinter. Any indoor play area where water play is allowed should be provided with floor runners of cloth, rubber or plastic to prevent slipping when wet.

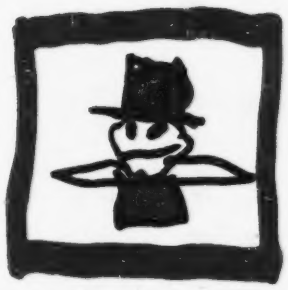
Emergency measures in the event of an accident at the Center should be clearly outlined. A physician should be available for immediate consultation by telephone at all times. Telephone numbers or other means by which parents may be contacted must be on file at the Center. Some member of the staff should have first aid training; an adequate supply of first aid equipment should be on hand for emergencies and to care for minor cuts and bruises.

Fire exits must be clearly marked and all personnel at the Center, including volunteers, should know their location.

VII. Summary: Principal Elements of the Medical Program for the Child Development Center

1. A physician should be recruited who will cooperate in organizing the medical program, be available for consultation about specific problems and arrange for medical examinations. When a large number of children are involved, additional medical assistance should be obtained for examinations. In this event, medical students or hospital house staff may be hired to work under the supervision of the physician, who may also delegate certain responsibilities to the nurse.





2. When possible, a nurse with training and experience in public health nursing should be employed. If the local health department or visiting nurse association cannot provide someone, a registered nurse should be employed for the required number of hours. In the latter event, the nurse employed should be familiarized with Well Child Clinic procedures by the public health nurse.

3. Contact with a local dentist or with the local dental society should be made to arrange for personnel to do dental screening and to provide necessary dental care. Often, the local health department can be of assistance. Such preventive dental practices and dental health education should be part of this program.

4. Children who need special care or treatment should be referred to specialty clinics or to a medical specialist. These arrangements may be made with the consulting physician and other professional consultants for the Center, the local or state health department, the state Crippled Children's program or a hospital or medical school. Eye examinations and arrangements for eyeglasses should be included in these plans. Existing medical care resources, agencies or programs which are unable to meet the needs for follow-up services should be clearly identified.

5. Biologicals such as immunizing and tuberculin testing materials can probably be obtained from the local health department. Measles vaccine may be purchased where it is not provided by the health department. Plans for equipment to administer these should also be made with health officers.

6. Parents should be asked to serve as volunteers in the Center. Neighborhood organizations, local voluntary health agencies or civic service groups may be potential sources of volunteers. Provisions should be made for transportation to clinics and for volunteers to accompany children and their parents, when desirable.

7. Local health and safety regulations related to day care or nursery school facilities should be known to the Center staff and should be followed.

8. In conjunction with local and state health departments, plans should be outlined for a program of health education and dental health education for parents. These should be coordinated with other programs planned by teachers or social welfare personnel for parents.

APPENDIX I

Tympanic membrane abnormalities associated with varying degrees of hearing impairment.[1]

"All categories of otoscopically abnormal ears showed, on the average, significantly less sensitive hearing levels as compared with otoscopically normal children. Degrees of less sensitive hearing were greatest in children with findings indicating acute and chronic disease and were less in children with signs of healed or past disease such as retraction and scarring of the tympanic membrane. When both ears had abnormal findings, hearing levels in children with otoscopic abnormalities, many of them had as sensitive hearing as children who were classed as otoscopically normal."

"The most important medical history events associated with less sensitive hearing levels were earaches and ear discharge and when this was combined with otoscopic evidence of infection, past or present, the degree of less sensitive hearing was greater. Number of times of occurrence of both earache and ear discharge seemed important, with more frequent occurrence apparently associated with comparatively less sensitive hearing levels. A history of both earache and ear discharge appeared associated with greater degrees of lessened hearing sensitivity than when only earache was reported. When earache, ear discharge and ear operation, such as myringotomy, were reported, the degree of less sensitive hearing was not so great as when no ear operation was reported."

"A history of earaches and ear discharge, especially when accompanied by otoscopic evidence of past or present infection, indicates a child who needs special otological and audiological services. The frequency of occurrence of these conditions appears to be a measure of the urgency of this need."

[1]Subcommittee on Hearing in Children, Committee on Conservation of hearing, American Academy of Ophthalmology and Otolaryngology, Purchased by: The Laryngoscope, 640 South Kingshighway, St. Louis, Missouri, 63110, U.S.A.

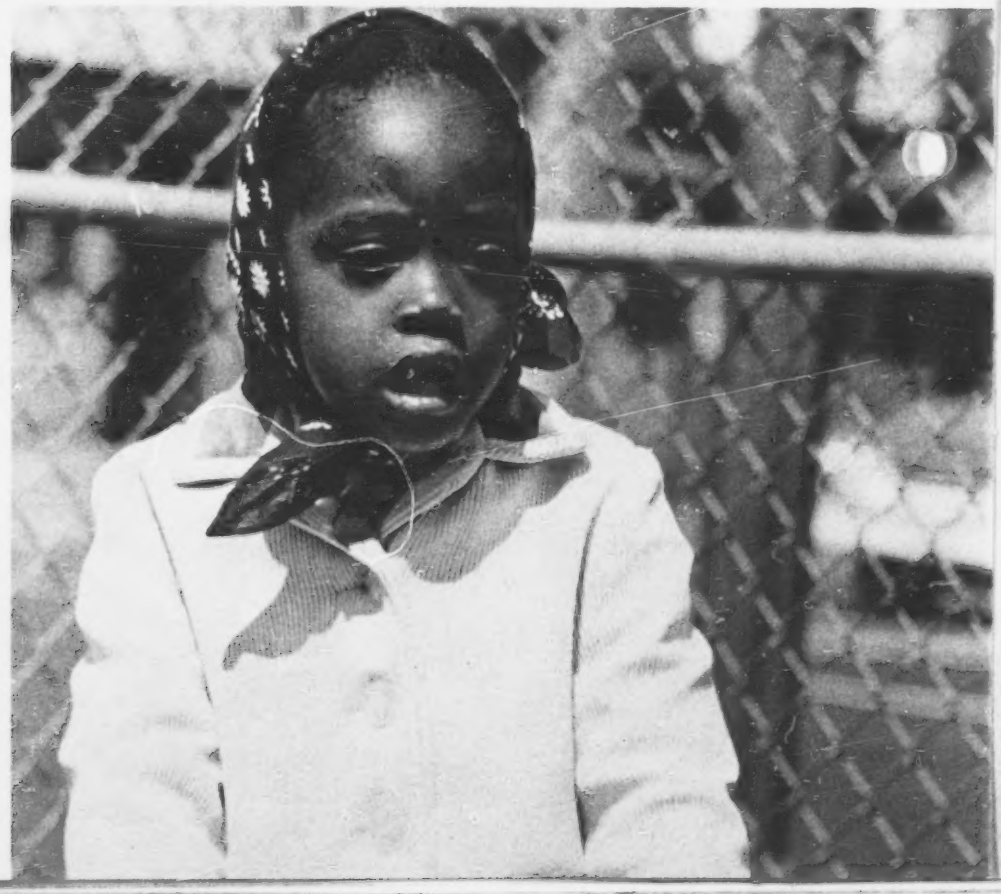
APPENDIX II

Hearing Evaluation

Subtle defects in the neurosensory system may interfere with learning and the normal progression of development. Hearing is one of these critical senses and deserves special attention.

In the five year old age group, individual pure-tone audiometry is the method of choice for hearing testing.[1] It is recognized, however, that the expense of the equipment and the need for a sound-proofed room in addition to the time and expense needed to train and supervise audiometric technicians will make this optimal testing method impractical for some Centers. A few areas which are already equipped to carry out this procedure may be able to extend it to the newly established Child Development Center. Where possible this is recommended. School systems or hearing and speech consultants to the health department may also make testing equipment available to the Center. With the help of the hearing consultant, useful information may also be obtained by this type of testing. A child who performs poorly or equivocally in any of the screening tests should be referred to a hearing and speech center or clinic for audiometry and definitive diagnosis.

[1]Journal of Speech and Hearing Disorders. Monograph, Supplement Number 9, September 1961. A Journal of the American Speech and Hearing Association.



APPENDIX III

Pre-School Vision Screening*

Purpose

An attempt to identify vision abnormalities among pre-school age children and alert parents to seek advice of specialists as early as possible when indicated.

Recruitment and Qualifications of Screening Personnel

The vision screening of pre-school age children can be done by volunteers working under supervision. The volunteers must be responsible persons, willing to be trained and to commit themselves to a definite screening schedule. They should be able to establish an easy relationship with young children, should have normal visual acuity, a clear speaking voice and good hearing. The volunteers work in teams of two and three.

Training of Screening Personnel

Training should be supervised by an ophthalmologist, optometrist or other suitably trained person. Approximately four 2 hour training sessions are required plus screening under supervision.

The training should include:

Orientation to sight conservation.

Orientation to vision screening, its purpose and limitations. The screening procedures, practice in screening, supervised screening.

Note:

Films which may be useful are listed in Appendix IV.

Orientation of Child Development Center Staff

Sight conservation: the purpose and procedures of vision screening responsibility for:

Teaching children to play the vision screening game.

Entering required data on screening forms.

Preparation of Children for Screening

Teach children to play the game "Show and Tell Which Way the Fingers Point." Instructions and sample cards are usually a part of the test materials package. Practice playing the game a few minutes a day until it is mastered.

*Adapted from—National Society for the Prevention of Blindness.

Equipment

(School systems or health departments may have this equipment available for vision screening programs.)

Long handled plastic occluder
Set of graduated, plastic E cards
Plus lens (2.25) glasses
Cover test target for near
Cover test target for distance
Worth Dot Test light and red-green glasses
Light meter
Lamp (60 watt bulb) and extension cord
20 ft. tape measure
2 children's chairs
2 regular chairs
Table or desk
Screening record forms and pencils
Backdrop (white paper or cloth—
approx. 1 yd. square)
Eye patches
Kleenex and wastebasket
Replacement batteries
Adhesive or masking tape
Screening instructions
(Sources of Supply are listed at the end of this Appendix.)

The Screening Room

A room is required which provides the 20-foot screening distance, is quiet and free of distraction and lighted with a uniform, diffused light (not less than ⅓ of the amount of illumination on the target area). Place the backdrop at the child's eye level against an uncluttered wall without windows. Eliminate bright light or glare from within the child's field of vision. Provide 15-20 foot candles of illumination, measured with a light meter, on the target area. Measure 20-feet from the wall against which the screening cards will be shown and mark the distance with adhesive tape or washable paint. Place the back legs of the child's screening chair on the 20-foot line.

The Screening Procedure

Welcome the child and tell him that you understand he already knows how to play the game of "showing and telling which way the fingers point." Establish his ability to play the game by showing the big E in several positions at close range. If the child wears glasses they should be worn during the screening and this fact recorded.

The Visual Acuity Test

Using the set of graduated E cards, show the largest E card at 20 feet.

Exhibit the cards one at a time, working down rapidly in size and varying the E positions, to the smallest symbol E able to be recognized with both eyes open.

Test the right eye by covering the left eye with the occluder.

Exhibit the cards one at a time, working down rapidly in size and varying the E positions, to the smallest symbol E able to be recognized correctly in 4 out of 6 positions.

When the child fails to recognize one size E, show the next larger size to determine whether he can recognize that size in 4 out of 6 positions.

Try the smaller E again in 6 positions.

The E size is indicated on the reverse side of the card as: 200, 70, 50, 40, 30, 20.

Record visual acuity for the right eye as the smallest size E the child can recognize correctly in 4 out of 6 positions.

Test the left eye by covering the right eye with the occluder.

Proceed as above.

Record visual acuity for the left eye.

Observe and record in the remarks column any variation from normal or unusual appearance of the child's eyes, behavior such as thrusting head forward, frowning, tilting head, rubbing eyes, etc.

Hyperopia Test

Place plus-lens glasses on the child.

Test the right eye by covering the left eye with the occluder.

Show the "20" size E at the 20-foot distance, varying the positions.

If the child is **unable** to recognize 4 out of 6 correctly, he passes. Record + (plus) for passing.

If the child is **able** to recognize 4 out of 6 correctly, he fails. Record − (minus) for failing.

Test the left eye by covering the right eye with the occluder.

Proceed as above.

Record + for passing, or − for failing.

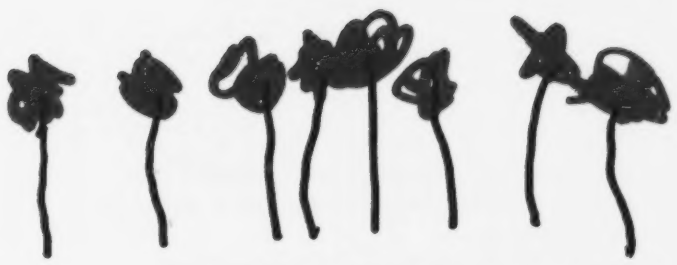
The Cover Test for Muscle Function

The cover test at near (13 inches) position.

Hold the test object about 13 inches from the child and instruct him to look at the object. Talk to him and question him about it so he won't stare, but will actually **look** at it.

Cover his right eye with the occluder. Observe the left eye.

If it does not move, cover the left eye and observe the right eye. If it too does not move record + (plus) for passing. If either one does move out to see the object, or in towards the nose to see the object, or if it is unsteady, this is abnormal. Record − (minus) for failing.



Repeat as many times as it takes to be sure of the results.

The cover test at distance (20 feet).

Place the test object 20 feet away. Instruct the child to look at the test object.

Proceed to test each eye as above.

Record the test results.

Worth Dot Test

Place glasses with red-green lenses on child.

Hold the illuminated Worth Dot flashlight about 14 inches from the child.

Ask the child to touch, with one finger, the lights he sees. (He may count them if he is able to count.)

If he points out 4 (four) lights, he passes. Record + (plus).

If he points out more or less than 4 (four) he fails. Record – (minus).

Reporting and Interpreting Vision Screening Results to Parents

A report of each child's performance on the vision screening test is sent to his parents.

The parents are advised to discuss abnormal screening performance with the child's physician, or personnel at the center.

Advisability of Follow-up Eye Examination by Proper Professional Personnel

Any deviation from normal in screening results, appearance, symptoms, complaints, etc., would be an indication that professional advice should be obtained.

Some Sources of Vision Screening Equipment and Supplies

Instructions for teaching the Vision Screening Game "Show and Tell Which Way the Fingers Point."

Maryland Society for the Prevention of Blindness
700 West 40th Street
Baltimore, Maryland 21211

Eye Patches for Occluding—optional

Item No. 340 Elastoplast Coverlets—2" x 3" (100 in a box)

Duke Laboratories, Inc. (Address listed below)

Cost: Approx. $27.00 per dozen boxes f.o.b.

House of Vision, Inc.
135-137 N. Wabash Avenue
Chicago, Illinois 60602

Matalene Surgical Instrument Company, Inc.
141 East 44th Street
New York City, New York 10017

Vari-Vue Animations
Pictorial Productions, Inc.
60 Kingsbridge Road, East
Mount Vernon, New York

Parsons Optical Laboratories
518 Powell Street
San Francisco, California 2

Duke Laboratories, Inc.
Duke Place
South Norwalk, Connecticut

White Plastic Occluder—2½" bowl, 9" handle
House of Vision, Inc. (Address listed below)

Set of Plastic Graduated E Symbols
Matalene Surgical Instrument Company, Inc. (Address listed below)
Cost per set: Approx. $7.50

Plus-Lens Glasses (2.25) in small frames
Any optical supply company
Cost: Approx. $8.00

Pictures for Near Cover Test—Size "S"—Mount on Tongue Depressors
Vari-Vue Animations
Pictorial Productions, Inc. (Address listed below)

Mechanical Toy for Distance Cover Test—Approx. 8"-10" high
Any toy store

Worth 4 Dot Test Set with Red-Green Spectacles
House of Vision, Inc. Catalogue Item No. X 7119
Cost: Approx. $9.00

Matalene Surgical Instruments Co., Inc.
Cost: Approx. $8.50

Parsons Optical Laboratories Catalogue Item No. 6460 (Address listed below)
Cost: Approx. $12.50

SAMPLE RECORDING FORM

Report of Vision Screening Test

Child's Name_____
Age_____
Date of Examination_____
Have glasses been prescribed previously?_____
Are they usually worn?_____
Were glasses worn during test?_____

Visual Acuity

Right Eye Left Eye

Test for Farsightedness—Plus Lens

Eye Muscle Function—Cover Test

Near Distant

Worth Dot Test

Name of person performing screening test_____

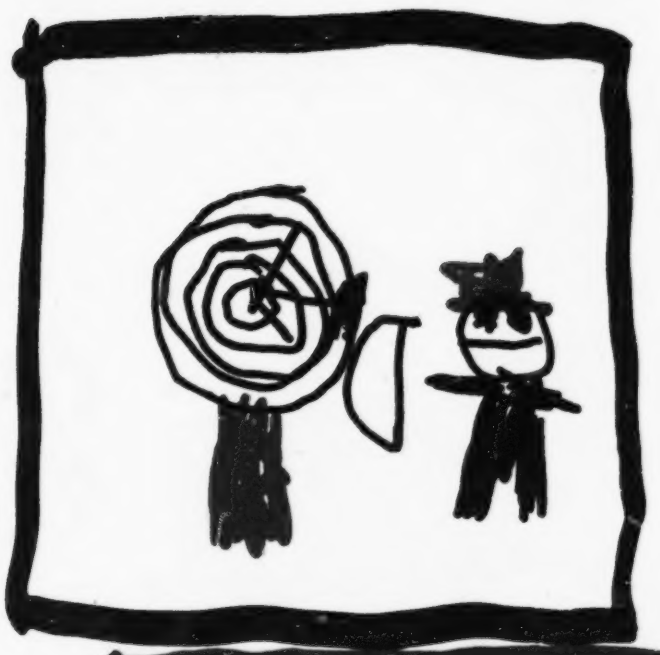
APPENDIX IV

Procedures Commonly Used by Health Departments for Tuberculin Testing and Follow-up of Positive Reactors

Tuberculosis continues to be a major public health problem, especially among children of low income families. Although the intracutaneous Mantoux test is necessary for diagnosis, the tine test is useful for screening purposes. It is recommended that all children in the Child Development Centers be tine tested unless it is known that the child has had a positive reaction to tuberculin in the past.

A child found to have a positive tuberculin test and with no history of having received BCG or therapy in the past should be treated with INH. All family members and others in close contact with the child should have chest X-rays. Local health officials will usually have well organized plans for dealing with this situation and will take responsibility for the follow-up.

The use of INH in tuberculin positive young children decreases the incidence of more severe forms of the disease such as miliary tuberculosis or meningitis. Therapy with orally administered INH should be continued for one year at a dose of 5 to 10 mg per kilogram of body weight per day.



APPENDIX V

Selected Bibliography
Health Program

Problems in Medical Care:

Burgess, M. E. and Price, D. O.: **An American Dependency Challenge.** Chicago, Illinois: American Public Welfare Association, 1963.

Saunders, L.: **Cultural Difference and Medical Care.** New York: Russell Sage Foundation, 1954.

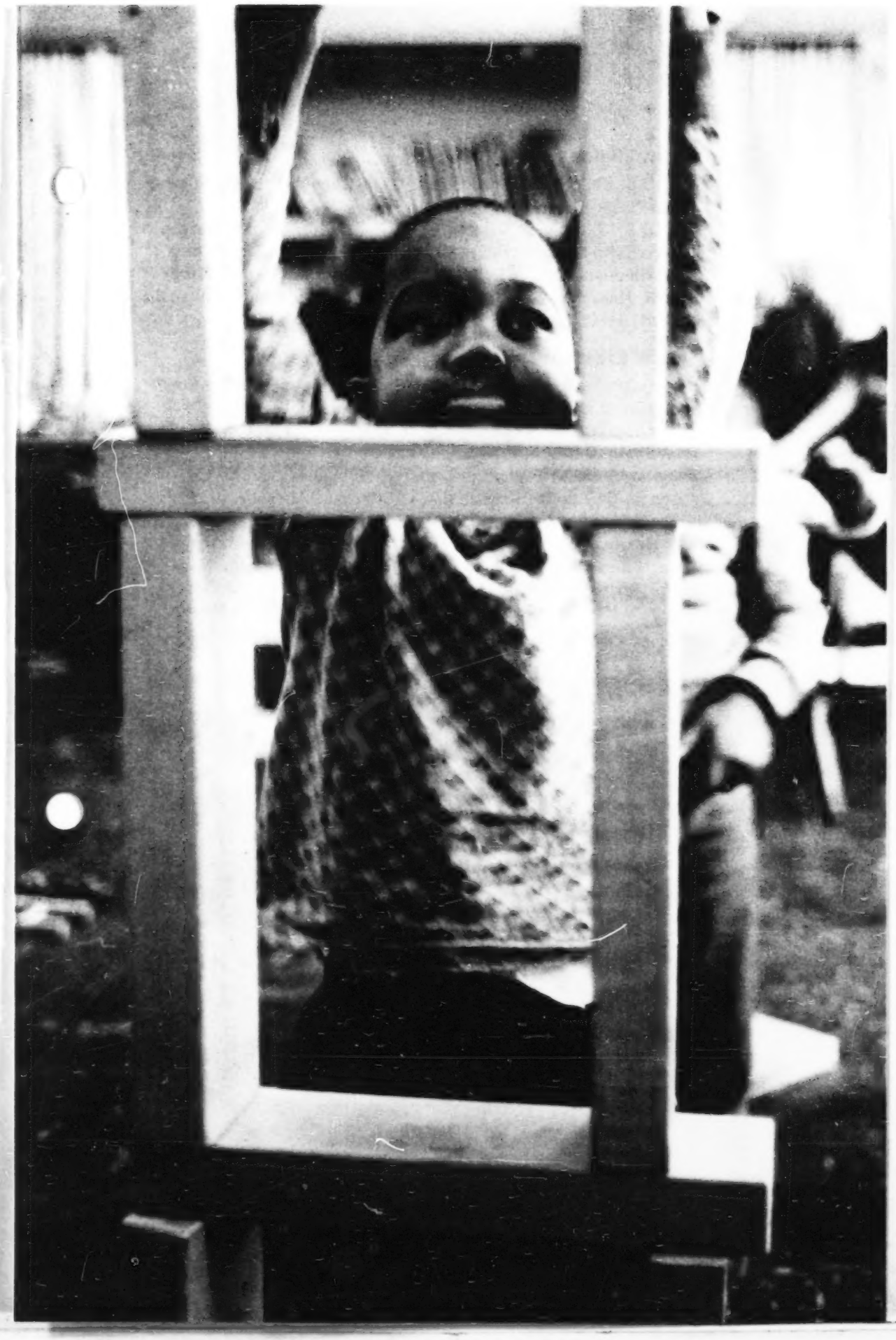
Silver, G.: **Family Medical Care.** Report on the Family Health Maintenance Demonstration. Cambridge, Mass.: Harvard University Press, 1963.

Principles of Well Child Care:

American Public Health Association. **Health Supervision of Young Children.** American Public Health Association, 1790 Broadway, New York, N.Y., Fourth Printing Edition, 1961. Paper edition $2.50.

American Academy of Pediatrics. **Report of the Committee on the Control of Infectious Disease.** American Academy of Pediatrics, 1801 Hinman Avenue, Evanston, Illinois 60204. 14th Edition, 1964. Price $1.50.

American Public Health Association. **Control of Communicable Diseases in Man.** Ed. John E. Gordon. 10th Edition. American Public Health Association, Broadway, New York, N.Y. 1965. Price $1.50.



General References:

U.S. Children's Bureau. **Your Child from One to Six.** Publication No. 30. Price 20 cents.

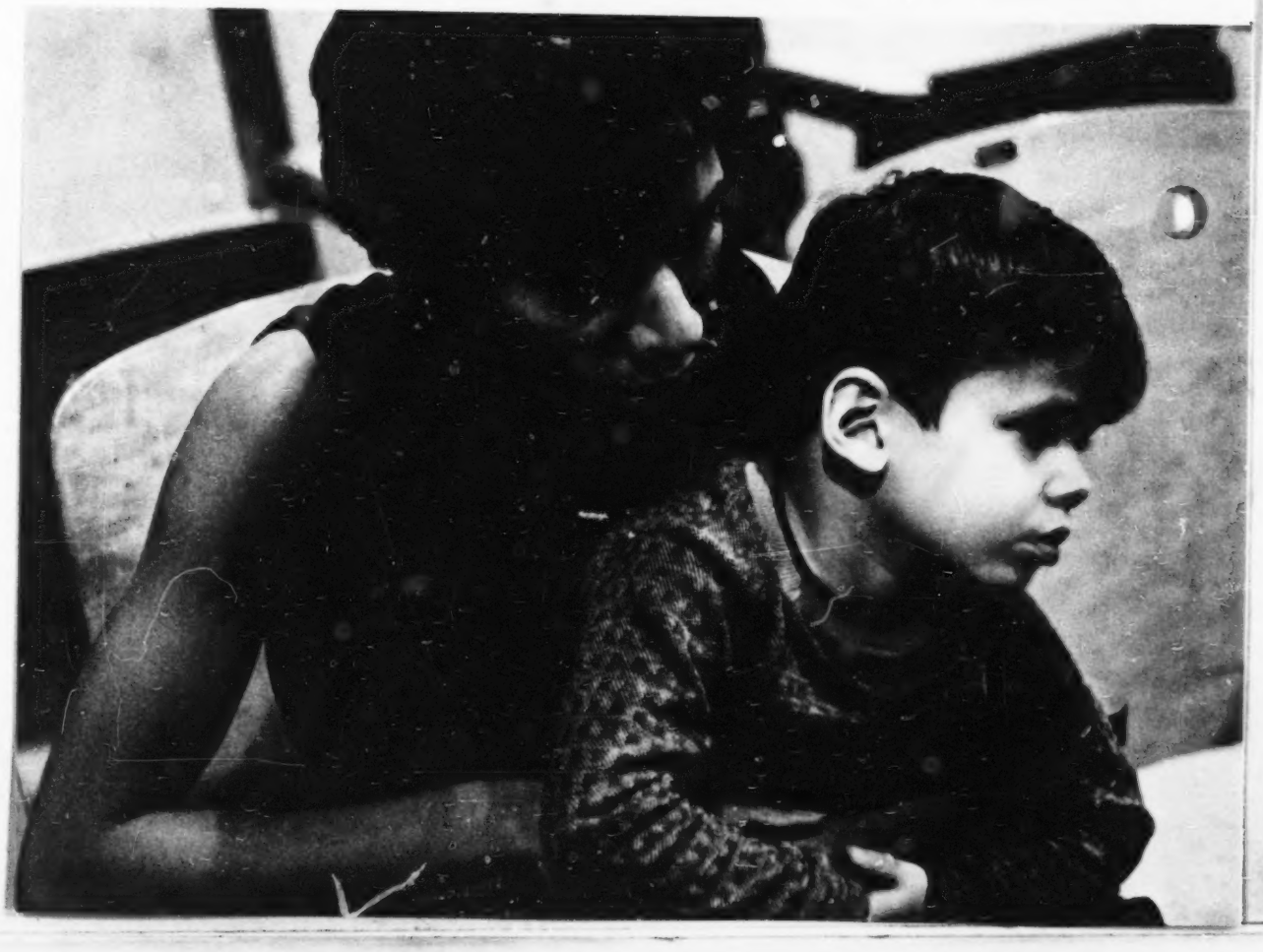
U.S. Children's Bureau. **Guide for Public Health Nurses Working with Children.** Publication No. 392, 1961. Price 20 cents.

Functions and Qualifications in the Practice of Public Health Nursing, Amer. Nurses Assn., Public Health Nurses Section, 10 Columbus Circle, New York, N. Y. 10019.

Special Examinations:

Subcommittee on Hearing in Children, Committee on Conservation of Hearing, American Academy of Ophthalmology and Otolaryngology in cooperation with Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pa. **Hearing Sensitivity and Related Factors in Children,** Published by: The Laryngoscope, 640 South Kingshighway, St. Louis, Missouri, 63110.

Committee on Identification Audiometry, American Speech and Hearing Association, **Identification Audiometry,** Journal of Speech and Hearing Disorders, Monograph Supplement No. 9, Sept. 1961. Price $1.90. Address Orders to Kenneth O. Johnson, Business Manager of Publications, American Speech and Hearing Association, 1001 Connecticut Avenue, N.W., Washington, D.C.



Vision Screening:

National Society for Prevention of Blindness, Inc. **A Guide for Eye Inspection and Testing Visual Acuity,** National Society for Prevention of Blindness, Inc., 16 East 40th St., New York, N.Y. 10016, P-200. Price 5 cents.

Source Materials for Health Education:

A Guide Book Describing Pamphlets—Posters—Films on Health and Disease, second edition, 1965, Maryland State Health Department, 301 W. Preston Street, Baltimore, Maryland 21201. Price $1.00.

Immunization:

Graves, Judy, **Right from the Start—The Importance of Early Immunization,** Public Affairs Pamphlet No. 350, Public Affairs Committee, 22 E. 38th Street, New York, N. Y. 10016. Price 25 cents.

FILMS

Vision:

National Society for Prevention of Blindness, **Betty Sees a Bird,** a 16 mm. black and white film with sound.

In this film, testing of pre-school children is conducted by a team of three trained volunteers. It is intended to train volunteers, teachers and nurses to test the vision of pre-school children. May be purchased from the Information and Education Department, Aetna Life Affiliated Companies, 151 Farmington Avenue, Hartford 15, Conn. Price $48.00. It may be obtained on a short term free loan basis from: The National Society for the Prevention of Blindness, Inc., 16 East 40th Street, New York, N.Y. 10016.

Utah Society for Prevention of Blindness and National Society for Prevention of Blindness, **Crossroads at 4,** a film which explains to parents the importance of early identification of amblyopia or lazy eye blindness. Price $97.00 from the National Society for Prevention of Blindness at above address.

National Society for Prevention of Blindness, **Johnny's New World,** 16 mm. sound, full color, 16½ min. Cleared for TV. Price $110.00 from National Society for Prevention of Blindness, 16 East 40th Street, New York, N. Y. 10016.

Canadian Institute for the Blind. **A Chance in Sight.** 16 mm. sound motion picture in color. Cleared for TV. The Canadian National Institute for the Blind, 929 Bayview Ave., Toronto 17, Canada. A film of general interest on the nature, symptoms and treatment of strabismus, a condition which causes serious vision loss for thousands of children.

Immunization:

Conference of State and Territorial Directors of Public Health Education, **Right from the Start,** 16 mm. sound, color, 22½ min. Cleared for TV. Public Affairs Committee, 22 East 38th Street, New York, N.Y. 10016. Price $130.00.

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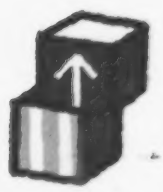
Experimental Early Childhood Program
Institute for Developmental Studies
N. Y. Medical College



Project HEAD START
Community Action Program
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